

Serial N . 09/633,857**Art Unit: 1765**

Sub 1
A1

1. (Amended) A method of depositing a film containing silicon on a crystalline silicon surface, said method including steps of
introducing a gas containing precursor material into a reaction vessel,
adsorbing an activated species formed from said precursor material on said crystalline silicon surface, and
determining a partial pressure of hydrogen in residual gases as said activated species is deposited on said crystalline silicon surface,
wherein said step of introducing includes introducing at least two gases according substantially to gas flow profiles depicted in regions I, II, V and VI of Figure 4.

Sub 2
A2

11. (Amended) Apparatus for depositing a film containing silicon on a crystalline silicon surface including
means for introducing a gas containing precursor material into a reaction vessel such that an activated species formed from said precursor material is adsorbed on said crystalline silicon surface, and
means for determining a partial pressure of hydrogen in residual gases as said activated species is deposited on said crystalline silicon surface,
wherein said means for introducing includes means for introducing at least two gases according substantially to gas flow profiles depicted in regions I, II, V and VI of Figure 4.

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